

F.L.S., giving an account of a double variety of the Field Scabious, *Scabiosa arvensis*, L. (*Knautia arvensis*, Coult.), a specimen of which he presented to the Society. The specimen was gathered in a stubble-field at Norton in the county of Durham on the 29th of September, and was the only one seen with a double flower, all the other plants in the field presenting the ordinary flower of the species. The doubling consists in the enlargement of the inner florets to the same size as the outer ones in the ordinary flowers; but the anthers and stamina of the former do not appear to have become abortive as in the outer enlarged florets, and as might have been expected from the similar change in the corolla. In Hooker's 'British Flora,' the species is characterized by the corolla of its outer florets having unequal and of its inner florets equal segments: in this double variety the segments of the inner florets are unequal like those of the outer.

Mr. Westwood, F.L.S., exhibited a small branch of a *Nelis d'hiver* pear grown against a wall in the garden of Mr. Wilmot, Isleworth, covered with a great number of large, solid, woody, gall-like protuberances caused by the punctures of a species of *Aphis* closely allied to the American blight, the twigs in this branch having been completely stunted in their growth, and not exceeding an inch in length, the energy of the tree having been concentrated in the growth of the protuberances. Mr. Westwood pointed out the difference between the real galls (sometimes quite hard and woody in their texture) caused by the punctures of insects and the deposition of eggs, and these pseudo-galls which did not enclose eggs, but were the result of the punctures of the proboscis of insects for obtaining an immediate supply of food. The latter are of great rarity, and Mr. Westwood had never seen any which could be compared in extent to the specimen exhibited, which was moreover covered with a whitish powder discharged from the bodies of the *Aphides*, and with a great number of the skins shed by them during their transformations.

Read a further continuation of Mr. Huxley's Memoir "On the Anatomy of the *Diphydæ*," &c.

#### ZOOLOGICAL SOCIETY.

May 22, 1849.—Harpur Gamble, Esq., M.D., in the Chair.

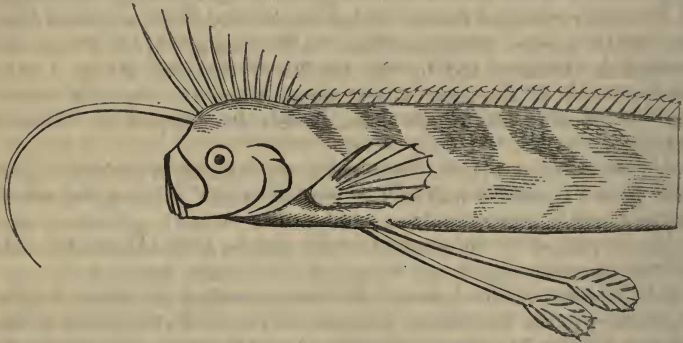
ON THE BRITISH SPECIMENS OF *REGALECUS*. BY J. E. GRAY, ESQ., F.R.S. &c.

The occurrence of a specimen of *Regalecus* on the coast of Northumberland, which is now being exhibited in Regent-street, has induced me to communicate the following remarks which I have collected connected with the history of its former occurrence in this country, some of which appear to have escaped the researches of our British naturalists.

Though the materials here referred to are mentioned by M. Valenciennes in the tenth volume of the 'Histoire des Poissons,' the refer-

ence is so indistinct and indefinite that it has not enabled British naturalists to discover where they were to be seen.

On a very accurate drawing of a fish of this genus, bound up with other notes on British fishes, at the end of a 4to copy of Pennant's British Zoology of 1776, which is contained in the library of the late Sir Joseph Banks, now forming part of the library of the British Museum, is the following, the head of which is reduced two-thirds in the following figure :—



“On Saturday the 23rd day of February, 1788, was caught near Newlyn Quay, on the sand at ebb-tide, a fish which measured in length 8 feet 4 inches, breadth 10 inches, and thickness  $2\frac{1}{4}$  inches; weight 40 lbs.”

The drawing is inscribed, by another hand, “*Regalecus Glesne*, Ascan. Icon. t. 11; Müller, Z. D. n. 355. *R. remipes*, Nov. Act. Hafn. n. 414;” and on the margin there is added in another hand the following note :—

“N.B. A gentleman who saw this fish informed Capt. Chemming (Chelnwyn?) that the tail was not perfect, and supposed it was originally longer than is represented.”

The body of the fish is silvered, with obscure indications of darker cross-bands, and the fins are all salmon-coloured; the first ray of the dorsal over the eyes is elongated and bent down over the front of the head, and each of the two ventral fins ends in an ovate radiated appendage.

This figure, representing the first British example on record, is certainly the best and most trustworthy representation of the fish that I have seen. A reduced copy of this drawing is here given.

Valenciennes, to whom a copy of this figure has been sent by Mrs. Lee, mentions it in the History of Fish, vol. x. p. 365, but has translated *Newlyn Quay* into “*Necolyn Quay*.”

Dr. Russell (Fishes of Coromandel, i. 29) observes: “In 1796 a fish of this genus was cast on shore in Cornwall, a drawing and description of which were sent to Sir Joseph Banks. It has two ventral cirri, and in the crest of the head resembled the present subject more than any of the others: the tail had been broken off.”

Shaw (Zool. iv. 198) observes: "It appears from a print published in the year 1798, that a specimen of this fish (*Gymnetrus Hawkenii*) was thrown on the coast of Cornwall in the month of February in the same year. Its length was 8 feet 6 inches, its breadth in the widest part  $10\frac{1}{2}$  inches, and its thickness  $2\frac{3}{4}$  inches. The tail in this specimen was wanting; the colour the same as in the specimen (of *Gymnetrus Hawkenii*) figured by Dr. Bloch."

I have no doubt, as Valenciennes suspected (see Hist. Poiss. x. 375), from comparing these accounts with the drawing in the edition of Pennant above quoted, and with Russell's and Shaw's notices, that they are from that authority, and that the two dates in the notes, and the length mentioned by Dr. Shaw, are mistakes of the copyist. I have not been able to find the engraving mentioned by Shaw, which was doubtless made from this drawing, though there is a slight variation in each of the items of the measurements given by the latter author. Could he have considered this drawing as a published print? The writing is so beautifully executed that he might be deceived unless he examined it very carefully.

Mr. Couch, in his paper on Cornish fishes, Linn. Trans. xiv. 77, informs us, under

"*Ceil Conin*.—This fish was drawn on shore in a net at Newlyn (Newlyn) in this country in February 1791. The extremity of the tail was wanting; the length of what remained was  $8\frac{1}{2}$  feet, the depth  $10\frac{1}{2}$  inches, thickness  $2\frac{3}{4}$  inches, weight 40 lbs. A coloured drawing of this fish is in the possession of W. Rashleigh, Esq., F.L.S., of Menabilly."

Mr. Couch has seen this drawing. A copy reduced to one-fourth its size is given by Mr. Yarrell in his excellent work on British Fishes, vol. ii. p. 221.

I have great doubt if the fish mentioned by Mr. Couch is not also the same specimen as the one described as caught on 23rd of February 1788, as it is found in the same place, is the same size and weight, &c., and that the date is a mistake. The addition of the two ventral fins was probably a fancy of the artist, like the addition of the tail, the drawing of the fish sent to Sir Joseph Banks being without these fanciful embellishments.

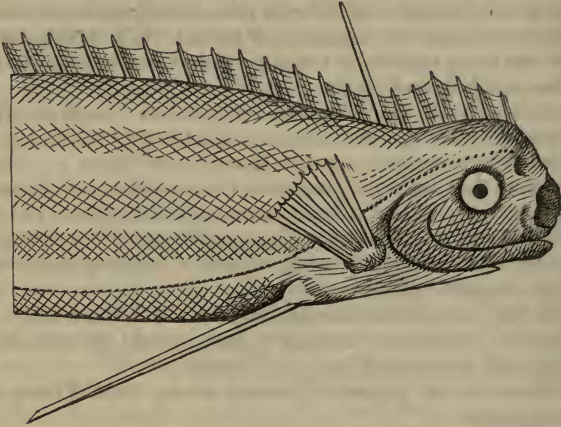
It has been supposed, because the copy of the drawing given by Mr. Yarrell is very like the figure of *Gymnetrus Hawkenii* in Bloch's Hist. Ich. xii. t. 433, that the drawing of the Cornish fish was the origin of Bloch's figure; but it is to be observed that Mr. Hawken sent a specimen as well as a drawing of the fish he received from Goa; that his specimen was only  $2\frac{1}{2}$  feet long, and the Cornish specimen  $8\frac{1}{2}$  feet. See Cuvier, Hist. Poissons, x. 374.

Dr. Shaw (Zool. iv. 197) informs us that the drawing of *Gymnetrus Hawkenii* was communicated by "J. Hawkins, Esq.;" and he added, "I am assured by Mr. Hawkins that this is really the case (the tail being added by the draughtsman), the specimen from which the drawing was taken having been defective in that part."

From this examination I conclude that these accounts are all from the specimen and figure in Pennant.



In the same copy of Pennant's 'British Zoology' occurs the following note and figure, which is here copied two-thirds the size:—



“ ‘ York, March 29, '96.—On Friday last a curious and uncommon fish came on shore at Filey Bay, and was taken by four women ; they sold it to a man who brought it to this city ; it was  $13\frac{1}{2}$  feet in length, rather more than one foot in depth, and not more than 3 inches in thickness. Its skin was smooth and of a silver hue : had no tail, and its fins were the colour of those of the roach or perch. It may be considered as a nondescript, neither Linnæus, Pennant, or any other writers on Ichthyology having given any description of it.’

“ This paragraph is cut from the York Chronicle of last Thursday, and the enclosed I traced from a drawing by Dr. Burgh, who penned the paragraph and made the following notes on his drawing.”—J. F.

“ 13 feet long, 1 deep, 3 inches thick ; head 7 inches long ; eye  $1\frac{3}{8}$  diam. ; no scales, but very small protuberances, silvered over like the swim of a herring ; these run the whole length in stripes, alternate with others which are bare, and of a light colour.

“ The dorsal fin runs the whole way from the head to the other end, at which there is no tail. The dorsal fin is red, like that of a roach or perch ; 6 bronchial rays ; dorsal fin 290 and 13 rays ; the pectoral 12 ; ventral 1 ; no anal. No teeth ; a soft tongue. The face and inside of the mouth black. Anus 4 feet 9 inches from the head. Iris a silver-white. He ran on shore at Filey Bay, March 18, 1796 ; was seen by four women, who took him and sold him to a man who brought him to York, where on March 21 I saw him. Though there was then no caudal fin, it is not clear that he never had one, for there was an appearance of mutilation in its place. The two sides were precisely alike. The eye in the drawing is placed a little too low.”—W.B.

This description is mentioned by M. Valenciennes in his ‘ Histoire des Poissons,’ x. 365, under the name of *Gymnetrus Banksii* ; nothing is said of the figures which accompanied the letter. I can see nothing

in the account or figures to induce me to believe that it is different from the *Regalecus Glesne*, or the specimen from Cornwall.

Mr. Yarrell, in his letter to Mr. Whitehead, printed in Dr. Jacobs's account of the Northumberland specimen, p. 10, gives the description of a specimen which was caught in March 1844, at Crovie, near Macduff, in Scotland, sent by Mr. John Marten of Elgin to Dr. George Johnston and Mr. Yarrell.

It would therefore appear that the specimen from the coast of Northumberland is at least the fourth time that a fish of this genus has been recorded as found on the coast of Britain.

From the comparison of the various descriptions and figures given by the English observers, and those given by Ascanius, Brunnich and Lindroth, I believe there is only a single species yet found in the North Sea, and it appears that that species occasionally comes as far south as the coast of Cornwall.

The great distinction between *Regalecus Glesne* and *R. Grillii* is the number of the rays in the dorsal fin; but as Valenciennes justly observes, that Ascanius's figure represents more rays than he describes the specimen to have had, and in this respect it agrees with the description of *R. Grillii* and with the specimens which have since occurred, I think it probable that the number in the text is a misprint.

Ascanius represents the five longitudinal streaks mentioned in the description of the Filey specimen.

Mr. Whitehead's specimen agrees with the one from Filey, in having the five convex longitudinal lines. These lines are shown in the painting made from the fish when more fresh, but they are not so distinct in the specimen in the fluid; yet they have been rendered more visible than when I first saw it by some glass which had been put on the specimen to sink it in the fluid.

The black bands so well marked in the painting of this fish were also observed in the specimen cast ashore at Crovie, near Macduff, in March 1844, described by Mr. Marten, and in *Gymnetrus Grillii* of Lindroth; and they are indistinctly represented in the drawing of the Cornish specimen.

The ventral fins in Mr. Marten's specimen "consisted of two filaments 3 feet in length; they were fringed with a thin membrane on two sides, and had evidently been broken."

This shows the affinity of the black-striped fish with the *Glesne* of Ascanius and the *S. Grillii* of Lindroth, and I have no doubt that the slight dilatation at the end of the ventral fins in his figure is a mere enlargement of the membranous fringes above described.

The following appear to be the synonyma of this species:—

REGALECUS GLESNE.

1. *Ophidium Glesne*, Ascanius, Mem. Soc. Copenh. iii. 419.  
*Regalecus Glesne*, Ascanius, Icon. ii. t. 11. cop. E. M. t. 358;  
 J. J. (J. Jacob), An account of the rare fish, &c. 8vo, 1849,  
 figures Illustrated London News, June 2, 1849, p. 384 fig.  
*Regalecus remipes*, Brunnich in Nya Saml. iii. 414. t. 13. f. 4, 5;  
 copied by Walbaum, t. 3. f. 4.

- Gymnetrus remipes*, Schneider, Syst. Ichth. 482. t. 88, altered from Ascanius; copied by Yarrell, Brit. Fish.
- Regalec Glesne*, Lacep. ii. 214, 215.
- Gymnetrus Ascanii*, Shaw, Zool. iv. ii. 1. t. cop. from Ascanius.
- Le Gymnetre Glesne*, Valenciennes, Hist. Poissons, x. 365 & 366. From the figure of the Newlyn specimen.
2. *Gymnetrus Grillii*, Lindroth, Kongl. Vetensk. Acad. Nya Handl. 1798, 288. t. 8 (from a dry fish); Schneider, Syst. Ichth. 482; Valenciennes, Hist. Poissons, x. 370.
3. *Le Gymnetrus Banksii*, Valenciennes, Hist. Poissons, x. 365. From the letter respecting the Filey specimen.
4. *Ceil Conin* = *Gymnetrus Hawkenii*, Couch, Trans. Linn. Soc. xiv. 77. part.; Yarrell, Brit. Fish. 221. part. From the Newlyn specimen (not Bloch, Ich. xii. t. 423?).
5. *Gymnetrus Northumbricus* (Hancock's MSS. ?), 1849.
- Gymnetrus* —? Marten in Jacobs's Account of Rare Fish, 1849, p. 10.
6. *Sea Serpent*, Ladies' Newspaper, 12th May, 1849.

M. Valenciennes, by mistake, thinks that Ascanius described this fish first as *Regalecus*, and then as an *Ophidium*, but 1766 comes before 1772. The specific name of *Glesne* is derived from the name of the place on which the fish was found, near Bergen in Norway.

The generic name of *Regalecus*, characterized in 1772, has the undoubted priority over *Gymnetrus* of Schneider, and therefore ought to be used; neither are quite unexceptionable, the one being a mixture of Greek and Latin, and the latter as conveying a false character, for the fish has ventral fins; but I think it is not desirable to change names which have once been used for such reasons, though it is well to avoid giving names having the first objection, and the second should always be avoided.

The Banksian copy of Pennant is very valuable to the British zoologist, and contains, besides the figures and letters here referred to, some shorter notes, the titles of which I here give, as they may be of use to persons residing at a distance from the library.

Vol. I. Aylmer Bourke Lambert, letter on the Irish Wolf Dog.

P. 224. Note on Grouse.

P. 346. Mr. Pearson of Newport Street, account of keeping Swallows through the winter.

Letter from James Hervey of Manchester, on the arrival of Swallows.

P. 352. List of indigenous Mammalia and Birds that are wanting to the British Museum, by W. E. Leach, M.D.

The price of Heronshaws in 1556.

A Fenman's List of the Fowls found in the East Fen.

Vol. II. p. 357. Letter from T. J. Woodward of Walcot, respecting the Heron with the crest.

Vol. III. p. 109.—1. A figure of a short Sun-fish, inscribed "Portrait of a Sun-fish for Sir Joseph Banks, Bart., from his obliged and humble serv' Richard Brocklesby."



P. 137.—2. A beautiful drawing of a Launce, by “W. W. Ellis, ad viv. delin. et pinxt. 1779.”

P. 138.—3. A letter from L. Morris, accompanied by a pen sketch of the ‘Morris’ *Leptocephalus*, copied from a blank page in Lewis Morris’s Ray Synopsis, by Mr. Lloyd, at Aberystwith, 1786. This note is copied into the edition of ‘Pennant’s Zoology’ for 1812, p. 215, where the editor observes: “The above memorandum is preserved in the copy of the British Zoology in the valuable library of the President of the Royal Society in Soho Square.” The editor does not notice any of the other papers in the Banksian copy of Pennant.

P. 178.—4. A note about the name of the *Torse*.

P. 187.—5. Sir William Musgrave’s note accompanying a Spotted Goby and a young Angel Fish.

P. 213.—6. Hugh Davies’ reply to Donovan respecting the trifurcated Hake, from the North Wales Gazette, March 1810.

P. 213.—7. Moses Griffith in reply to Donovan, from the Cambrian, Dec. 30, 1809.

P. 372.—8. The description of three fish, accompanied by very good figures in India ink, probably by Colonel Montague (? ?).

Viz. 1. *Leptocephalus Morrissii*.—I may observe, that on the continent they apply this name to a species which is much longer and more slender than the one figured by Pennant and Yarrell, and Costa has given the name of *L. candidissimus* to the shorter British species; we have both species from Costa in the British Museum.

2. *Cæpola rubescens*.

3. The Variegated Sole, *Solea lingula*. In the MSS. it is stated, “This fish is sometimes taken in Torbay in the trawling-nets. It differs at first sight from the common sole in the edges of the scales being strongly ciliated, and in wanting the numerous small beards that hang from the lower side of the head of the common sort.” This appears to be the Red-back described from E. Hanmer’s MSS. in the 1812 edition of Pennant, but there is no reference to this figure.

9. The letter from J. F. respecting the fish from Filey Bay, *R. Banksii* of Valenciennes.

10. The drawing of *Regalecus Glesne* from Newlyn Quay.

I may also mention, that in this copy of Pennant the plate 93, called *Ophidium imberbe*, Brit. Zool. App. iii., is marked in pencil, apparently by Dr. Solander, as being “*Muraena Anguilla*.” This probably explains why the figure is replaced in the edition of 1812 by Montague’s figure from the Wernerian Transactions, as mentioned by Yarrell, Brit. Fishes, 412 & 414, where these two figures are copied.

Since this paper was read, there has appeared in the ‘Annals of Natural History’ a full description of Mr. Whitehead’s specimen, and an account of some other specimens found on other parts of the English coast.